

**IN THE CLAIMS**

The claims are amended as follows:

1. (currently amended) A method for assembling an imaging system comprising the acts of:
  - assembling a detector, the detector being adapted to fit within a housing, and the detector having an array of pixels forming rows and columns, each pixel having radiation detection circuitry for providing a signal from radiation received;
  - sealing the detector after assembling the detector;
  - assembling the detector within a housing, the housing being adapted to provide a unified structure, the housing comprising a mounting base and an outer cover; and
  - sealing the housing on all sides thereof.
2. (original) The method as in claim 1, wherein the act of assembling the detector comprises the acts of:
  - coating a glass substrate with silicon oxide in a vapor deposition chamber;
  - depositing photodiodes on a glass substrate;
  - depositing conductive readout lines, the readout lines capable of reading out data;and
  - depositing a film of cesium iodide on the glass substrate.
3. (original) The method as in claim 1, wherein the act of sealing the detector comprises coating the detector with parylene.
4. (original) The method as in claim 1, wherein the act of sealing the housing comprises the act of coating the housing with parylene.

5. (original) The method as in claim 2, wherein the readout lines are masked during the act of sealing the detector.

6. (currently amended) A sealed detector for an imaging system comprising:

a detector including[,] an array of pixels forming rows and columns, each pixel having radiation detection circuitry for providing a signal from radiation received by the detector;

a housing assembly, the assembly being configured to receive the detector and having a body with a recess and a plurality of elements fitted within the recess; and

a protective layer surrounding exterior portions of the housing assembly to seal all sides thereof.

7. (original) The detector as in claim 6, wherein the protective layer is a parylene coating.

8. (original) The detector as in claim 6, wherein the detector includes a detector assembly comprising:

a glass substrate having a silicon oxide coating;  
a plurality of photodiodes deposited on the glass substrate;  
conductive readout lines configured to reading out data from the plurality of photodiodes; and  
a film of cesium iodide on the glass substrate.

9. (original) The detector as in claim 6, wherein a coating surrounding exterior portions of the detector is applied.

10. (original) The detector as in claim 6, wherein the detector includes readout conductors extending from the housing assembly.

11. (original) The detector as in claim 6, wherein the housing assembly includes a body adapted to receive the detector assembly and a cover.

12. (currently amended) A digital imaging system, comprising:  
a source of radiation;  
a control circuit to regulate the source of radiation; and  
a detector for receiving radiation from the source of radiation and generating signals therefrom, the detector having an array of pixels forming rows and columns, and a protective layer, the protective layer being coated on the surface of the detector to seal all sides thereof.

13. (original) The system as in claim 12, wherein the protective layer on the detector includes a parylene coating.

14. (original) The system as in claim 12, wherein the detector is adapted into a housing.

15. (original) The system as in claim 14, wherein the housing comprises:  
a mounting base, having peripheral walls; and  
a cold plate adapted to cover the mounting base, and configured to fasten to the mounting base creating a recess, and the detector being adaptable into the recess.

16. (original) The system as in claim 15, wherein the housing is coated with a protective layer of parylene.

17. (original) An sealed imaging system detector comprising:  
means for detecting radiation including an array of pixels forming rows and  
columns;  
means for housing the means for detecting; and  
means for sealing the means for housing on all sides thereof.
18. (original) The imaging system detector as in claim 17, wherein the  
means for housing comprises means for receiving a panel assembly into a housing.
19. (original) The imaging system detector as in claim 17, wherein the  
means for housing includes means for fastening the means for detecting to the means for  
housing.
20. (original) The imaging system detector as in claim 17, wherein means  
for housing includes a plurality of elements for adapting a housing to a detector.
21. (original) The imaging system detector as in claim 17, wherein the  
means for sealing comprises means for coating the means for detecting.
22. (original) The imaging system detector as in claim 17, wherein the  
means for sealing comprises a parylene layer disposed over the means for housing.